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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,416	04/09/2004	Keith E. Barr	542262000300	1218
25226	7590	08/04/2005	EXAMINER	
MORRISON & FOERSTER LLP			MAFAHER, NINA YASMIN	
755 PAGE MILL RD			ART UNIT	
PALO ALTO, CA 94304-1018			PAPER NUMBER	
			2855	

DATE MAILED: 08/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/821,416	BARR, KEITH E.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Nina Y. Mafaher	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-12, 14-16, 18-20 is/are rejected.
- 7) ☒ Claim(s) 4, 13 and 17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, and 20 rejected under 35 U.S.C. 102(b) as being anticipated by Zeiss (5,245,862).

With respect to Claim 1, Zeiss teaches a device comprising of a substrate with a sensor coupled to it for emitting a signal upon sensing impact of an object, and measuring a first time period between a first signal from the sensor and a second signal from the sensor and measuring a second time period between the second signal from the sensor and a third signal from the sensor (Column 1, lines 52-56; Column 1 & 2, lines 64-2).

With respect to Claims 2 and 11, Zeiss teaches calculating a rebound value based on the first time period and the second time period (Column 1, lines 56–60).

With respect to Claims 5 and 14, Zeiss teaches a display for displaying the rebound value (Column 8, lines 4-6).

With respect to Claims 6, 15, and 16, Zeiss teaches a clock source; a counter driven by a clock source (Column5, lines 59-60); a microcontroller

(Column 7, lines 17 – 18) such that: upon receipt of a first signal the counter is reset and upon receipt of subsequent signals the value of the counter is stored and then reset (Column 6, lines 50-53; Column 8, lines 32 & 64-66).

With respect to Claim 7, Zeiss teaches a transducer coupled to a substrate (Column 1, line 65).

With respect to Claim 8, Zeiss teaches a method comprising issuing a first signal in response to a first impact of the object onto a substrate, issuing a second signal in response to a second impact of the object onto a substrate, measuring a first time period between the first signal and the second signal, issuing a third signal in response to a third impact of the object onto the substrate, and measuring a second time period between the second signal and the third signal (Column 8, lines 21-31).

With respect to Claim 9, Zeiss teaches dropping the object onto a substrate to cause the first impact (Column 7, lines 28-29).

With respect to Claim 10, Zeiss teaches issuing a first signal from a transducer coupled to a substrate in response to a first impact of an object onto a substrate and issuing a second signal from a transducer coupled to a substrate in response to a second impact of an object onto a substrate (Column 8, lines 21-31).

With respect to Claim 20, Zeiss teaches the object is a golf ball (Column 2, line 19).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeiss (5,245,862) in view of Fisher (5,921,871).

Zeiss teaches the invention set forth above and further teaches that the coefficient of restitution is computed by comparing the time periods between the impact of an object on a substrate as a ratio (Column 1, lines 56-60).

Zeiss does not teach that the rebound value is calculated by a ratio of the square of the first time period to the square of the second time period.

Fisher teaches that the coefficient of restitution is defined as being equal to the square root of the rebound value (Column 7, lines 47 – 54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the calculation of Zeiss with that of Fisher for the purpose of determining the rebound value, since the rebound value is equal to the square of the coefficient of restitution, which in turn is equal to a ratio of the square of the first time period to the square of the second time period.

5. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeiss (5,245,862) in view of Salem (4,197,524).

Zeiss teaches the invention set forth above but fails to teach a method comprising of aborting the testing process if an elapsed time between the first signal and the second signal or between the second signal and the third signal exceeds a predetermined threshold time of one second.

Salem teaches a device that remains active after a signal resulting from a sensor for a predetermined threshold time and then becomes inactive when another signal is not received within that time threshold.


It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the circuitry of Zeiss with that of Salem for the purpose of aborting a process if a signal is not received in a specified amount of time, since this would prevent errors when an expected event does not occur and also decreases power drain.

***Allowable Subject Matter***

Claims 4, 13, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NYM

  
**Michael Tokar**  
Supervisory Patent Examiner  
Technology Center 2800